

Receipt date: 06/12/2008

PTO/SB/08A (02-03)

Approved for use through 4/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/574,330
				Filing Date	March 31, 2006
				First Named Inventor	Maute
				Art Unit	2856
				Examiner Name	Fitzgerald, John P.
				Attorney Docket Number	RSE004
Sheet	1	of	3		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
	1	US-3,076,334	02-05-1963	Wiley	
	2	US-3,530,713	09-29-1970	Nazareth, Jr.	
	3	US-3,999,443	12-28-1976	Appel, et al.	
	4	US-RE28,989	10-05-1976	Cushing	
	5	US-4,228,350	10-14-1980	Paap, et al.	
	6	US-4,631,969	12-30-1986	Schmoock	
	7	US-4,704,907	11-10-1987	Mannherz et al.	
	8	US-4,938,073	07-03-1990	Stephenson	
	9	US-4,953,408	09-04-1990	Appel, et al.	
	10	US-4,969,363	11-13-1990	Mochizuki	
	11	US-5,251,479	10-12-1993	Siegfried, II, et al.	
	12	US-5,297,425	03-29-1994	Hamby, et al.	
	13	US-5,388,455	02-14-1995	Hamby, et al.	
	14	US-5,448,920	09-12-1995	Ketelsen, et al.	
	15	US-5,551,287	09-03-1996	Maute, et al.	
	16	US-6,173,793 B1	01-16-2001	Thompson, et al.	
	17	US-6,237,424 B1	05-29-2001	Salmasi, et al.	
	18	US-6,431,011 B1	08-13-2002	Feller	
	19	US-6,453,754 B1	09-24-2002	Florin	
	20	US-6,711,947 B2	03-30-2004	Maute	
	21	US-6,779,407 B2	08-24-2004	Maute	
	22	US-6,971,271 B2	12-06-2005	Maute	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
	23	GB- 811 347 A	04-02-1959	Philips Electrical Ind Ltd		
	24	GB- 2 064 130 A	06-10-1981	Hemp, J.		
	25	JP 58-17318	02-01-1983	Hokushin Electric Works		
	26	WO 01/11190 A1	02-15-2001	Schlumberger Technology B.V., et al.		
	27	WO 02/101194 A1	12-19-2002	REM Scientific Enterprises, Inc.		
	28	GB 2 405 214 A	02-23-2005	Schlumberger Holdings Limited		

Examiner Signature	/John Fitzgerald/	Date Considered	09/22/2008
--------------------	-------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/574,330
				Filing Date	March 31, 2006
				First Named Inventor	Maute
				Group Art Unit	2856
				Examiner Name	Fitzgerald, John P.
Sheet	2	of	3	Attorney Docket Number	RSE004

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	1 ²
/JF/	29	MAUTE, R.E., "A Guide to Diagnosing Your Wells: Production Logging," Probe Technology Services, Inc., 2000, 9 pages.	
↓	30	HILL, A.D., et al., "Production Logging Tool Behavior in Two-Phase Inclined Flow," 56 th Annual Fall Technical Conference and Exhibition of the Society of Petroleum Engineers of AIME, San Antonio, TX, Oct. 5-7, 1981, 13 pages.	
	31	BRANAGAN, P., et al., "Tests Show Production Logging Problems in Horizontal Gas Wells," Oil & Gas Journal, Jan. 10, 1994, pp. 41-45.	
	32	KELMAN, J.S., "Biphasic Fluid Studies for Production Logging in Large-Diameter Deviated Wells [sic]," The Log Analyst, Nov. - Dec. 1993, pp. 6-10.	
	33	DING, Z.X., et al., "A Comparison of Predictive Oil/Water Holdup Models for Production Log Interpretation in Vertical and Deviated Wellbores," SPWLA 35 th Annual Logging Symposium, June 19-22, 1994, pp. 1-18.	
	34	NICE, S.B., "Production Logging in Horizontal Wellbores," 5 th World Oil et al. Horizontal Well Technology Int. Conference (Houston) Proc., sect 11, Nov. 1993, 7 pages.	
	35	ZHU, D., et al., "The Effect of Flow from Perforations on Two-Phase Flow: Implications for Production Logging," 63 rd Annual Technical Conference and Exhibition of the Society of Petroleum Engineers, Houston, TX, Oct. 2-5, 1988, pp. 267-275.	
	36	MOLZ, F.J., et al., "Development and Application of Borehole Flowmeters for Environmental Assessment," The Log Analyst, Jan.-Feb. 1993, pp. 13-23.	
↓	37	ROSS, G., "The Electromagnetic Flowmeter as Applied to the Measurement of Blood Flow in Living Systems," Symposium on Flow: Its Measurement and Control in Science and Industry, Vol. 1, Pittsburgh, PA, 1971, pp. 1337-1345.	
	38	CUSHING, V.J., "Electromagnetic Water Current Meter," Water Resources Instrumentation, Vol. 1 Measuring and Sensing Methods, Proceedings of the International Seminar and Exposition on Water Resources Instrumentation, June 4-6, 1974, Chicago, IL, pp. 35-55.	
/JF/	39	RAZI, M., et al., "Characterizing Flow through a Perforation Using Ultrasonic Doppler," Production Operations Symposium, Oklahoma City, OK, Apr. 2-4, 1995, pp. 943-953.	

Examiner Signature	/John Fitzgerald/	Date Considered	09/22/2008
--------------------	-------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/574,330
				Filing Date	March 31, 2006
				First Named Inventor	Maute
				Group Art Unit	2856
				Examiner Name	Fitzgerald, John P.
Sheet	3	of	3	Attorney Docket Number	RSE004

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite, No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/JF/	40	BAKER, R.C., "A Review of Some Applications of Electromagnetic Flow Measurement," Symposium on Flow: Its Measurement and Control in Science and Industry, Vol. 1, Part 2, Flow Measuring Devices, 1971, pp. 745-753.	
↓	41	FLOOD, J. "Single-Sensor Measurement of Flow in Filled or Partially Filled Process Pipes," Sensors Magazine, September 1997, 4 pages.	
	42	DONEY, B., "EMF Flow Measurement in Partially Filled Pipes," Sensors, October 1999, pp. 65-66 & 68.	
	43	MAUTE, B., "Practical Interpretation of Production Logs," Version 9.0, Customized for the China National Oil and Gas Exploration & Development Corporation, Earth Resource and Environment Center, The University of Texas at Arlington, Dec. 17-19, 1997, pp. 1-160.	
	44	International Search Report for Corresponding International Application No. PCT/US 02/16895, dated September 24, 2002.	
	45	KOLIN, A., "Electromagnetic Velometry. I. A Method for the Determination of Fluid Velocity Distribution in Space and Time," Journal of Applied Physics, Vol. 15, February 1944, pp. 150-164.	
	46	KLIMAN, G.B., "Calibration of an Electromagnetic Velocity Probe for Electrically Conducting Liquids," The Review of Scientific Instruments, No. 6, Vol. 33, June 1962, pp. 684-685.	
	47	KOLIN, A., <i>et al.</i> , "Electromagnetic Velometry. II. Elimination of the Effects of Induced Currents in Explorations of the Velocity Distribution in Axially Symmetrical Flow," Journal of Applied Physics, Vol. 25, No. 4, April 1954, pp. 409-413.	
/JF/	48	UK International Search and Examination Report for corresponding Application No. GB0605456.3.	

Examiner Signature	/John Fitzgerald/	Date Considered	09/22/2008
--------------------	-------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.